

CLAIMS

1. A method of capturing communication associated information (CAI) of a communication between a subject and an associate, the method comprising the steps of:

intercepting the communication, the communication comprising at least one packet and each packet comprising CAI;

providing an application identifier (AID) in the at least one packet of the communication, the AID identifying the format of the CAI;

extracting in accordance with the AID the CAI from the at least one packet for reporting;

determining whether the extracted CAI is a new instance of the CAI; and

reporting a first message in response to a determination that the extracted CAI is the new instance of the CAI.

2. The method of Claim 1, wherein the method further comprises the steps of:

determining whether a given amount of time has elapsed between packets of the at least one packet of the communication, the packets being identified by the CAI; and

reporting a second message in response to a determination that the given amount of time has elapsed.

3. The method of Claim 2, wherein the second message comprises at least one of a subject identifier, a time stamp indicating when the message was sent, the IP address of the subject, a packet direction indicator identifying whether the message was sent or received by the subject, the IP address of the associate, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of packets identified by the CAI seen since a last message.

4. The method of Claim 1, wherein the method further comprises the steps of:

determining whether a given number of packets of the at least one packet of the communication has been intercepted, the packets being identified by the CAI; and

reporting a third message in response to a determination that the given number of packets identified by the CAI has been intercepted.

5. The method of Claim 4, wherein the third message comprises at least one of a subject identifier, a time stamp indicating when the message was sent, the IP address of the subject, a packet direction indicator identifying whether the message was sent or received by the subject, the IP address of the associate, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of packets identified by the CAI seen since a last message.

6. The method of Claim 1, wherein the AID is located in the Network Layer 3.

7. The method of Claim 1, wherein the AID is located in the protocol field of the Network Layer 3.

8. The method of Claim 1, wherein the AID is located in the optional field of the Network Layer 3.

5 9. The method of Claim 1, wherein the method further
comprises the step of:

providing an AID-tag in the at least one packet of the communication, the AID-tag indicating the presence of the AID.

10 10. The method of Claim 1, wherein the method further
comprises the steps of:

15 providing an AID-tag in the at least one packet of
 the communication, wherein the AID-tag
 indicates the presence of the AID, and wherein
 the AID-tag is located in the protocol field of
 the Network Layer 3.

11. The method of Claim 1, wherein the first message comprises at least one of a subject identifier, a time stamp indicating when the message was sent, the IP address of the subject, a packet direction indicator identifying whether the message was sent or received by the subject, the IP address of the associate, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of packets identified by the CAI seen since a last message.

12. A method of consolidating at least one packet of a communication between a subject and an associate, the method comprising the steps of:

receiving at least one packet of the communication,
each packet comprising communication associated
information (CAI);

determining whether a packet is a new instance of
the CAI;

reporting the CAI in response to a determination
that the packet is a new instance of the CAI;
and

reporting the CAI periodically in response to a
determination that the packet is a subsequent
packet.

13. The method of Claim 12, wherein the step of determining whether a packet is a new instance of the CAI is performed by comparing the CAI with a previous CAI.

14. The method of Claim 12, wherein the step of determining whether a packet is a new instance CAI is performed by allowing a given amount of time to elapse since the receipt of the at least one packet.

15. The method of Claim 12, wherein the CAI report comprises at least one of a subject identifier, a time stamp indicating when the message was sent, the IP address of the subject, a packet direction indicator identifying whether the message was sent or received by the subject, an associate

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identifier, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of packets identified by the CAI seen since a last report.

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~~16.~~ A method of providing access to communication associated information (CAI) of at least one packet of a communication between a subject and an associate, the method comprising the steps of:

5 providing an application identifier (AID) in the at
 least one packet, the AID indicating a format
 of the CAI in the at least one packet;
 intercepting at least one of the at least one packet
 of the communication with the subject;
10 extracting in accordance with the AID the CAI from
 the packet;
 formatting a message comprising at least a portion
 of the extracted CAI; and
 providing access to the message.

15 17. The method of Claim 16, wherein the message
 comprises at least one of a subject identifier, a time stamp
 indicating when the message was sent, the IP address of the
 subject, a packet direction indicator identifying whether the
 message was sent or received by the subject, an associate
20 identifier, a first instance indicator identifying the new
 instance of the CAI, and a counter indicating the number of
 packets identified by the CAI seen since a last message.

18. A method of indicating the format of CAI in at least one packet of a communication, the method comprising the steps of:

providing an application identifier tag in the at least one packet, the application identifier indicating the presence of an application identifier and communication associated information (CAI); and

providing the application identifier in the at least one packet, the application identifier indicating the format of the CAI.

19. The method of Claim 18, wherein the application identifier tag is located in the protocol field of the Network Layer 3.

20. The method of Claim 18, wherein the application identifier is located in the optional field of the Network Layer 3.

21. A method of indicating the format of communication associated information (CAI) in at least one packet of a communication by providing an application identifier in the least one packet.

5 22. The method of Claim 21, wherein the application identifier is located in the protocol field of the Network Layer 3.

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~~23~~. An apparatus for providing access to communication associated information (CAI) of a communication between a subject and an associate, the apparatus comprising:

means for intercepting the communication, the communication comprising at least one packet and each packet comprising CAI;

means for providing an application identifier (AID) in the at least one packet of the communication, the AID identifying the format of the CAI;

means for extracting in accordance with the AID the CAI from the at least one packet for reporting;

means for determining whether the extracted CAI is a new instance of the CAI; and

means for reporting a first message in response to a determination that the extracted CAI is the new instance of the CAI.

24. The apparatus of Claim 23, wherein the apparatus further comprises:

means for determining whether a given amount of time has elapsed between packets of the at least one packet of a communication, the packets being identified by the CAI; and

means for reporting a second message in response to a determination that the given amount of time has elapsed.

25. The apparatus of Claim 23, wherein the apparatus further comprises:

means for determining whether a given number of packets of the at least one packet of the communication has been intercepted, the packets being identified by the CAI; and

means for reporting an intermediate CAI message in response to a determination that the given number of packets of the at least one packet of the communication has been intercepted.

26. The apparatus of Claim 23, wherein the apparatus further comprises:

means providing an AID-tag in the at least one packet of the communication, the AID-tag indicating the presence of the AID.

27. The apparatus of Claim 23, wherein the apparatus further comprises:

means for providing an AID-tag in the at least one packet of the communication, wherein the AID-tag indicates the presence of the AID, and wherein the AID-tag is located in the protocol field of the Network Layer 3.

~~28.~~ An apparatus for consolidating at least one packet of a communication between a subject and an associate, the apparatus comprising:

means for receiving at least one packet of the communication, each packet comprising communication associated information (CAI);

means for determining whether a packet is a new instance of CAI;

means for reporting the CAI in response to a determination that the packet is the new instance of CAI; and

means for reporting the CAI periodically in response to a determination that the packet is a subsequent packet.

~~29~~. An apparatus for providing access to communication associated information (CAI) of at least one packet of a communication with a subject, the apparatus comprising:

means for providing an application identifier (AID)

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in the at least one packet, the AID indicating
a format of the CAI in the at least one packet;

means for intercepting at least one of the at least
one packet of the communication with the
subject;

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means for extracting in accordance with the AID the
CAI from the packet;

means for formatting a message from the extracted
CAI; and

means for providing access to the CAI message.

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means for providing an application identifier tag in the at least one packet, the application identifier indicating the presence of an application identifier and CAI; and

the first step in the process of the development of the system is the identification of the system's purpose and objectives. This is followed by the identification of the system's components and the identification of the system's interfaces. The next step is the design of the system's architecture, which includes the design of the system's components and the design of the system's interfaces. The final step is the implementation of the system, which includes the development of the system's components and the development of the system's interfaces.